



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,988	03/11/2004	Yuichi Taguchi	16869B-060600US	8793
20350	7590	04/27/2006	EXAMINER	
TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			DARNO, PATRICK A	
			ART UNIT	PAPER NUMBER
			2163	

DATE MAILED: 04/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/799,988

Applicant(s)

TAGUCHI ET AL.

Examiner

Patrick A. Darno

Art Unit

2163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 04212006
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-27 are pending in this office action.

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 and 35 U.S.C. 103 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Basis for obvious rejections under 35 U.S.C. 103(a):

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4, and 6 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Patent Application Publication Number 2005/0114438 issued to Justin Russell Bendich et al. (hereinafter "Bendich").

Claim 1:

Bendich discloses a networked data processing system comprising one or more host servers, a switching component, and a data storage component, a storage access method comprising:

receiving a user-originated request for data storage, the request including a service policy, the service policy being associated with one or more data storage performance criteria (Bendich: paragraph [0048], lines 1-4 and paragraph [0006], lines 4-6; The first reference shows the user requests for storage that includes a service policy. Note specifically “allow the user to...specify one or more storage management policies.” The second reference shows some of the data storage performance criteria that are considered with the policies.);

identifying a data store from among a pool of data stores defined in the data storage component (Bendich: paragraphs [0054] and [0055]; These references clearly show identification of a data store (servers) from among a pool of data stores (servers).);

communicating with a data storage agent to establish a data path within the data storage component for data communication between the port and the data store, the data storage agent being one of a plurality of data storage agents that manage portions of the data storage component (Bendich: paragraphs [0034], lines 1-4 and paragraph [0033], lines 3-7 and paragraph [0044], lines 13-17; The first reference shows that “storage agents” are used for managing the data storage servers. The second reference shows that the storage resource manager (which uses the storage agents) uses storage provisioning policies to manage the storage system. Provisioning (or allocating) storage would require the establishing of a data path. The third reference shows how the invention of Bendich monitors these established data paths.);

identifying a network path for data communication between a host server that is identified in the user-originated request and the port (Bendich: paragraph [0044], lines 13-17; This reference clearly shows the identification or discovery of either single or redundant data paths between network resources.); and

communicating with a network agent to allocate the network path, the network agent being one of a plurality of network agents that manage portions of the network storage component (Bendich: paragraph [0033], lines 3-7 and paragraph [0044], lines 3-5 and 13-17; The first reference shows the provisioning (or allocation) of storage which requires the allocation of a data path or network path. The second and third references show that the monitoring module uses agents (network agents) to manage the connectivity paths.).

The claimed limitation "identifying a port on the data store by applying a rule to the one or more data storage performance criteria" is not explicitly disclosed in the Bendich reference. However the limitation "identifying a port on the data store by applying a rule to one or more data storage performance criteria" is in fact inherent. First, it should be noted that the Bendich reference clearly discloses identifying a data store (server) (Bendich: paragraphs [0054] and [0055]). Further, the data store is determined based on a policy or rule (Bendich: paragraph [0033], lines 3-7). A data store is identified based on a policy so that storage space from the data store can be allocated or provisioned to a client located remotely from the server (Bendich: paragraph [0056], lines 7-9 and Fig. 1). Some form of port is required to provide a network connection between two network components. There must be network communication that takes place between the client and data store in order for the client to access the allocated or provisioned storage located on the remote data store. This communication takes place over a network connection. The network connection connects a port on the client computer to a port on the data store. In order for the client and data store to communicate, the port on the data store must be identified (or located).

While Bendich does not explicitly disclose identifying a port on the data store by applying a rule to the one or more data storage performance criteria, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the invention set forth by Bendich must include identifying a port on the data store by applying a rule to the one or more data storage performance criteria (Bendich: paragraphs [0054] and [0055] and [0056], lines 7-9; For further explanation of these references, see statement of inherency above.). The skilled artisan would have realized that there must be an identified port on the identified data store because the port would have to be utilized in order for the client, which is located remotely from the server, to access the storage on the data store (or server).

Claim 4:

Bendich discloses all the elements of claim 1, as noted above, and Bendich further discloses a method comprising communicating with a host agent to allocate resources on the host server that is identified in the user-originated request, the host agent being one of the plurality of host agents that manage the one or more host servers (Bendich: paragraph [0034], lines 1-4 and also paragraph [0044]).

Claim 6:

Claim 6 is a computer program product claim corresponding to method claim 1 and is rejected under the same reasons set forth in the rejection of claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2-3 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bendich in further view of U.S. Patent Number 6,687,651 issued to Mark A. W. Stewart (hereinafter "Stewart").

Claims 2 & 7:

Bendich discloses all the elements of claims 1 and 6, as noted above, but does not explicitly disclose wherein the step of applying a rule to the one or more data storage performance criteria produces a bandwidth metric, wherein the port is characterized by the bandwidth metric.

However, Stewart discloses wherein step of applying a rule to the one or more data storage performance criteria produces a bandwidth metric (Stewart: column 3, lines 27-28 and column 4, lines 35-37; Note that Stewart has a particular method (or predefined rules) to calculate a bandwidth metric for each port.), wherein the port is characterized by the bandwidth metric (Stewart: column 4, lines 43-44; Shows switching to the port with highest available bandwidth. This shows that the ports are categorized by the size of the bandwidth.). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Bendich noted above with the teachings of Stewart noted above for the purpose of calculating a bandwidth metric for each port (Stewart: column 4, lines 35-37).

Art Unit: 2163

The skilled artisan would have been motivated to improve the teachings of Bendich per the above such that the bandwidth metric could be used to help determine which port to use (Stewart: column 4, lines 37-45; This reference shows how Stewart uses his bandwidth metric to determine an appropriate port.).

Claims 3 & 8:

The combination of Bendich and Stewart discloses all the elements of claims 2 and 7, as noted above, and Stewart further discloses wherein the network path has a bandwidth metric that is greater than or equal to the bandwidth metric of the port (Stewart: column 4, lines 35-45; Stewart discloses the use of a bandwidth metric in selecting a port. Arbitrarily selecting bandwidth to greater than, equal to, or less than a certain value is clearly a design choice.).

4. Claims 5, 9, 11, 13-14, 19-21, and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bendich in further view of U.S. Patent Application Publication Number 2004/0098606 issued to Yih-Shin Tan et al. (hereinafter "Tan").

Claim 5:

Bendich discloses all the elements of claim 1, as noted above, but does not explicitly disclose wherein the service policy is further associated with one or more security criteria, wherein the step of identifying a network path includes applying a second rule to the one or more security criteria to determine one or more security parameters, wherein the network path is identified based on the one or more security parameters.

However, Tan discloses wherein the service policy is further associated with one or more security criteria (Tan: paragraph [0009], lines 4-6), wherein the step of identifying a network path includes applying a second rule to the one or more security criteria to determine one or more security parameters, wherein the network path is identified based on the one or more security parameters (Tan: paragraph [0009], lines 7-17 and Abstract; This reference discloses first identifying a pool of service providers (servers or data stores) based on the service policy. As shown in Tan: paragraph [0009], lines 4-6, the service policy contains security criteria (security rules). Further, one particular service provider (server or data store) is selected (identified) from the grouping (pool) of service providers. Then a network path is established to the service provider so that the service provider can process the request (abstract).).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Bendich with the teachings of Tan noted above for the purpose of including security criteria in the service policy (Tan: paragraph [0009], lines 4-6). The skilled artisan would have been motivated to improve the teachings of Bendich per the above such that a service policy, including security rules, could be used to a service provider (or data store) (Tan: paragraph [0009], lines 9-12).

Claim 9:

Bendich discloses a networked data processing system comprising one or more host servers, a switching component, and a data storage component, a storage access method comprising:

receiving a user-originated request for data storage, the request including a service policy, the service policy being associated with one or more data storage performance criteria (Bendich: paragraph [0048], lines 1-4 and paragraph [0006], lines 4-6; The first

Art Unit: 2163

reference shows the user requests for storage that includes a service policy. Note specifically “allow the user to...specify one or more storage management policies.” The second reference shows some of the data storage performance criteria that are considered with the policies.);

identifying a data store from among a pool of data stores defined in the data storage component based on a first rule comprising an evaluation of the one or more data storage performance criteria (Bendich: paragraphs [0054] and [0055]; These references clearly show identification of a data store (servers) from among a pool of data stores (servers). Some of the data storage performance criteria that the policies are based on can be seen in paragraph [0006], lines 4-6.);

communicating with a data storage agent to establish a data path within the data storage component for data communication between the data store and a port on the data store, the data storage agent being one of a plurality of data storage agents that manage portions of the data storage component (Bendich: paragraphs [0034], lines 1-4 and paragraph [0033], lines 3-7 and paragraph [0044], lines 13-17; The first reference shows that “storage agents” are used for managing the data storage servers. The second reference shows that the storage resource manager (which uses the storage agents) uses storage provisioning policies to manage the storage system. Provisioning (or allocating) storage would require the establishing of a data path. The third reference shows how the invention of Bendich monitors these established data paths.);

communicating with a network agent to allocate the network path, the network agent being one of a plurality of network agents that manage portions of the network storage component (Bendich: paragraph [0033], lines 3-7 and paragraph [0044], lines 3-5 and 13-17; The first reference shows the provisioning (or allocation) of storage which requires the allocation of a

data path or network path. The second and third references show that the monitoring module uses agents (network agents) to manage the connectivity paths.).

Bendich does not explicitly disclose a service policy being associated with one or more security criteria. And while Bendich does disclose identifying a network path for data communication between a host server that is identified in the user-originated request and the port (Bendich: paragraph [0044], lines 13-17; This reference clearly shows the identification or discovery of either single or redundant data paths between network resources.), Bendich does not explicitly disclose identifying a network path for data communication between a host server that is identified in the user-originated request and the port, based on a second rule comprising an evaluation of one or more security criteria.

However, Tan discloses a service policy being associated with one or more security criteria (Tan: paragraph [0009], lines 4-6); and Tan further discloses identifying a network path for data communication between a host server that is identified in the user-originated request and the port, based on a second rule comprising an evaluation of one or more security criteria (Tan: paragraph [0009], lines 7-17 and Abstract; This reference discloses first identifying a pool of service providers (servers or data stores) based on the service policy. As shown in Tan: paragraph [0009], lines 4-6, the service policy contains security criteria (security rules). Further, one particular service provider (server or data store) is selected (identified) from the grouping (pool) of service providers. Then a network path is established to the service provider so that the service provider can process the request (abstract).).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Bendich with the teachings of Tan noted above for the purpose of including security criteria in the service policy (Tan: paragraph

Art Unit: 2163

[0009], lines 4-6). The skilled artisan would have been motivated to improve the teachings of Bendich per the above such that a service policy, including security rules, could be used to a service provider (or data store) (Tan: paragraph [0009], lines 9-12).

Claim 11:

The combination of Bendich and Tan discloses all the elements of claim 9, as noted above, and Tan further discloses wherein an evaluation of the second rule produces one or more security criteria (Tan: paragraph [0009], lines 4-6), wherein the network path is identified based on the one or more security criteria (Tan: paragraph [0009], lines 7-17 and Abstract; This reference discloses first identifying a pool of service providers (servers or data stores) based on the service policy. As shown in Tan: paragraph [0009], lines 4-6, the service policy contains security criteria (security rules). Further, one particular service provider (server or data store) is selected (identified) from the grouping (pool) of service providers. Then a network path is established to the service provider so that the service provider can process the request (abstract).).

Claim 13:

Claim 13 is a computer program product claim corresponding to method claim 9 and is rejected under the same reasons set forth in the rejection of claim 9.

Claim 14:

Claim 14 is a computer program product claim corresponding to method claim 11 and is rejected under the same reasons set forth in the rejection of claim 11.

Claim 19:

Bendich discloses a networked data processing system comprising one or more host servers, a switching component, and a data storage component, a storage access method comprising:

receiving a user-originated request for data storage, the request comprising a service policy (Bendich: paragraph [0048], lines 1-4 and paragraph [0006], lines 4-6; The first reference shows the user requests for storage that includes a service policy. Note specifically “allow the user to...specify one or more storage management policies.” The second reference shows some of the data storage performance criteria that are considered with the policies.);

identifying a data store from among a pool of data stores managed by the data storage component (Bendich: paragraphs [0054] and [0055]; These references clearly show identification of a data store (servers) from among a pool of data stores (servers).);

communicating with one or more data agents to allocate the data store (Bendich: paragraphs [0034], lines 1-4 and paragraph [0033], lines 3-7; The first reference shows that “storage agents” are used for managing the data storage servers. The second reference shows that the storage resource manager (which uses the storage agents) uses storage provisioning policies to manage the storage system. Provisioning (or allocating) storage would require the establishing of a data path.);

communicating with one or more network agents to configure the switching components to set up the network path (Bendich: paragraph [0033], lines 3-7 and paragraph [0044], lines 3-5 and 13-17; The first reference shows the provisioning (or allocation) of storage which requires the allocation of a data path or network path. The second and third references show that the monitoring module uses agents (network agents) to manage the connectivity paths. The monitoring and allocating (provisioning) of network paths would require the configuration of switching components (for example routers).).

Bendich does not explicitly disclose the service policy being associated with one or more security criteria. And while Bendich does disclose identifying a data store from among a pool of data stores managed by the data storage component (Bendich:

Art Unit: 2163

paragraphs [0054] and [0055]; These references clearly show identification of a data store (servers) from among a pool of data stores (servers.) and identifying a network path between a host server and the data store, wherein the host server is identified in the user originated request (Bendich: paragraph [0044], lines 13-17; This reference clearly shows the identification or discovery of either single or redundant data paths between network resources.), Bendich does not explicitly disclose wherein identifying a data store from among a pool of data stores managed by the data storage component and identifying a network path between a host server and the data store, are both occur based on some of the one or more security criteria.

However, Tan discloses the service policy being associated with one or more security criteria (Tan: paragraph [0009], lines 4-6); based on some of the one or more security criteria, identifying a data store from among a pool of data stores managed by the data storage component (Tan: paragraph [0009], lines 15-17); and based on some of the one or more security criteria, identifying a network path between a host server and the data store, wherein the host server is identified in the user originated request (Tan: paragraph [0009], lines 7-17 and Abstract; This reference discloses first identifying a pool of service providers (servers or data stores) based on the service policy. As shown in Tan: paragraph [0009], lines 4-6, the service policy contains security criteria (security rules). Further, one particular service provider (server or data store) is selected (identified) from the grouping (pool) of service providers. Then a network path is established to the service provider so that the service provider can process the request (abstract).).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Bendich with the teachings of Tan noted above for the purpose of including security criteria in the service policy (Tan: paragraph

Art Unit: 2163

[0009], lines 4-6). The skilled artisan would have been motivated to improve the teachings of Bendich per the above such that a service policy, including security rules, could be used to a service provider (or data store) (Tan: paragraph [0009], lines 9-12).

Claim 20:

The combination of Bendich and Tan discloses all the elements of claim 19, as noted above, and Bendich further discloses comprising communicating with a host agent to configure the host server (Bendich: paragraph [0034], lines 1-4 and also paragraph [0044]).

Claim 21:

The combination of Bendich and Tan discloses all the elements of claim 19, as noted above, and Bendich further discloses wherein the one or more criteria include a logical unit number (LUN) masking specification that identifies one or more LUN's in the pool of data stores (Bendich: paragraph [0031], lines 8-12).

Claim 24:

Bendich discloses a networked data processing system comprising one or more host servers, a switching component, and a data storage component, computer program code configured to operate a processor to perform steps of:

receiving a user-originated request for data storage, the request comprising a service policy (Bendich: paragraph [0048], lines 1-4 and paragraph [0006], lines 4-6; The first reference shows the user requests for storage that includes a service policy. Note specifically "allow the user to...specify one or more storage management policies." The second reference shows some of the data storage performance criteria that are considered with the policies.);

identifying a data store from among a pool of data stores managed by the data storage component (Bendich: paragraphs [0054] and [0055]; These references clearly show identification of a data store (servers) from among a pool of data stores (servers).);

identifying a port on the data store (Bendich: This feature of the invention is inherent. An explanation as to why this feature is inherent is given in the rejection of claim 1.);

communicating with one or more data agents to set up the data store and the port (Bendich: paragraphs [0034], lines 1-4 and paragraph [0033], lines 3-7; The first reference shows that "storage agents" are used for managing the data storage servers. The second reference shows that the storage resource manager (which uses the storage agents) uses storage provisioning policies to manage the storage system.);

identifying a network path between a host server and the port on the data store, wherein the host server is identified in the user-originated request (Bendich: paragraph [0044], lines 13-17; This reference clearly shows the identification or discovery of either single or redundant data paths between network resources.); and

communicating with one or more network agents to configure the switching component to set up the network path (Bendich: paragraph [0033], lines 3-7 and paragraph [0044], lines 3-5 and 13-17; The first reference shows the provisioning (or allocation) of storage which requires the allocation of a data path or network path. The second and third references show that the monitoring module uses agents (network agents) to manage the connectivity paths.).

Bendich does not explicitly disclose the service policy being associated with one or more security criteria; and wherein one or more of the steps of identifying include determining a security parameter from the one or more security criteria and performing the identifying step using the security parameter.

However, Tan discloses wherein the service policy is associated with one or more security criteria (Tan: paragraph [0009], lines 4-6); and wherein one or more of the steps of identifying include determining a security parameter from the one or more security criteria and performing the identifying step using the security parameter (Tan: paragraph [0009], lines 7-17 and Abstract; The security rules in the service policy are used to help determine a service provider (or data store).).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Bendich with the teachings of Tan noted above for the purpose of including security criteria in the service policy (Tan: paragraph [0009], lines 4-6). The skilled artisan would have been motivated to improve the teachings of Bendich per the above such that a service policy, including security rules, could be used to a service provider (or data store) (Tan: paragraph [0009], lines 9-12).

Claim 25:

The combination of Bendich and Tan discloses all the elements of claim 24, as noted above, and Bendich further discloses wherein the parameter is a LUN masking parameter, wherein the data store is configured in accordance with the LUN masking parameter (Bendich: paragraph [0031], lines 8-12).

5. Claims 10, 12, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bendich in view of Tan, and further in view of Stewart.

Art Unit: 2163

Claim 10:

The combination of Bendich and Tan discloses all the elements of claim 9, as noted above, but does not explicitly disclose wherein the port is identified based on a bandwidth metric that is determined by evaluating the first rule.

However, Stewart discloses wherein the port is identified based on a bandwidth metric based on a first rule (Stewart: column 3, lines 27-28 and column 4, lines 35-45; Note that Stewart chooses which port to use (identifies a port) based on a bandwidth metric.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the previously mentioned combination with the teachings of Stewart noted above for the purpose of calculating a bandwidth metric for each port (Stewart: column 4, lines 35-37). The skilled artisan would have been motivated to improve the teachings of Bendich per the above such that the bandwidth metric could be used to help determine which port to use (Stewart: column 4, lines 37-45; This reference shows how Stewart uses his bandwidth metric to determine an appropriate port.).

Claim 12:

The combination of Bendich and Tan discloses all the elements of claim 9, but does not explicitly disclose wherein the port is identified based on a bandwidth metric that is determined by evaluating the first rule and the network path is characterized by having a bandwidth metric that is greater than or equal to the bandwidth metric of the port.

However Stewart discloses wherein the port is identified based on a bandwidth metric that is determined by evaluating the first rule and the network path is

Art Unit: 2163

characterized by having a bandwidth metric that is greater than or equal to the bandwidth metric of the port (Stewart: column 4, lines 35-45; Stewart discloses the use of a bandwidth metric in selecting a port. Arbitrarily selecting bandwidth to greater than, equal to, or less than a certain value is clearly a design choice.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the previously mentioned combination with the teachings of Stewart noted above for the purpose of calculating a bandwidth metric for each port (Stewart: column 4, lines 35-37). The skilled artisan would have been motivated to improve the previously mentioned combination per the above such that the bandwidth metric could be used to help determine which port to use (Stewart: column 4, lines 37-45; This reference shows how Stewart uses his bandwidth metric to determine an appropriate port.).

Claim 16:

The combination of Bendich and Tan discloses all the elements of claim 13, as noted above, but does not explicitly disclose a computer program configured to operate the processing component to perform a method step of evaluating the first rule to produce a bandwidth metric, wherein the bandwidth metric is used to identify the port on the data store.

However, Stewart discloses a computer program configured to operate the processing component to perform a method step of evaluating the first rule to produce a bandwidth metric (Stewart: column 4, lines 35-37), wherein the bandwidth metric is used to identify the port on the data store (Stewart: column 3, lines 27-28 and column 4, lines 35-45; Note that Stewart chooses which port to use (identifies a port) based on a bandwidth metric.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the previously mentioned combination with the teachings of Stewart noted above for the purpose of calculating a bandwidth metric for each port (Stewart: column 4, lines 35-37). The skilled artisan would have been motivated to improve the previously mentioned combination per the above such that the bandwidth metric could be used to help determine which port to use (Stewart: column 4, lines 37-45; This reference shows how Stewart uses his bandwidth metric to determine an appropriate port.).

Claim 17:

The combination of Bendich, Tan, and Stewart discloses all the elements of claim 16, as noted above, and Tan further discloses a computer program configured to operate the processing component to perform a method step of evaluating the second rule to produce at least one security parameter, wherein the network path is identified based on the at least one security parameter (Tan: paragraph [0009], lines 7-17 and Abstract; The security rules in the service policy are used to help determine a service provider (or data store). And once a final service provider is selected, a network path is established to receive the services of the service provider. This is all done based on the service policy, which contains security rules (security parameters or security criteria).).

6. Claims 15, 22, 23, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bendich in view of Tan and further in view U.S. Patent Application Publication issued to David Banks et al. (hereinafter "Banks").

Claim 15:

The combination of Bendich and Tan discloses all the elements of claim 14, as noted above, but does not explicitly disclose wherein the at least one security parameter

Art Unit: 2163

includes one of a port zoning parameter and a WWN (world-wide name) zoning parameter.

However, Banks discloses wherein the at least one security parameter includes one of a port zoning parameter and a WWN (world-wide name) zoning parameter (Banks: at least paragraph [0055], lines 1-5; paragraphs [0055] and [0056] in their entirety are fairly descriptive). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the previously mentioned combination with the teachings of Banks noted above. The skilled artisan would have been motivated to improve the teachings of the previously mentioned combination per the above such that by using a WWN a device may be coupled to the fabric at any point or via any fabric element and it will retain the same zone membership (Banks: paragraph [0056], lines 8-11).

Claim 22:

The combination of Bendich and Tan discloses all the elements of claim 19, as noted above, but does not explicitly disclose wherein the one or more criteria include a WWN (world-wide name) zone specification, wherein the network path is identified based on the WWN zone.

However, Banks disclose wherein the one or more security criteria include a WWN (world-wide name) zone specification (Banks: paragraphs [0055] and [0056]), wherein the network path is identified based on the WWN zone (Banks: paragraph [0011], lines 12-16; The members of each zone (network path) are identified by port. And the ports are identified by WWN zone.). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the previously mentioned combination with the teachings

Art Unit: 2163

of Banks noted above. The skilled artisan would have been motivated to improve the teachings of the previously mentioned combination per the above such that by using a WWN a device may be coupled to the fabric at any point or via any fabric element and it will retain the same zone membership (Banks: paragraph [0056], lines 8-11).

Claim 23:

The combination of Bendich and Tan discloses all the elements of claim 19, as noted above, but does not explicitly disclose wherein the one or more criteria include a port zone specification (Banks: paragraphs [0055] and [0056]), wherein the network path is identified based on the port zone (Banks: paragraph [0011], lines 12-16). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the previously mentioned combination with the teachings of Banks noted above. The skilled artisan would have been motivated to improve the teachings of the previously mentioned combination per the above such that by using a WWN a device may be coupled to the fabric at any point or via any fabric element and it will retain the same zone membership (Banks: paragraph [0056], lines 8-11).

Claims 26 and 27:

Claims 26 and 27 are rejected under the same reasoning used to reject claims 15, 22, and 23.

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bendich in view of Tan in view of Stewart and further in view of Banks.

Claim 18:

The combination of Bendich, Tan, and Stewart discloses all the elements of claim 17, as noted above, but does not explicitly disclose wherein the at least one security parameter includes one of a port zoning parameter and a WWN (world-wide name) zoning parameter.

However, Banks discloses where the at least one security parameter includes one of a port zoning parameter and a WWN (world-wide name) zoning parameter (Banks: at least paragraph [0055], lines 1-5; paragraphs [0055] and [0056] in their entirety are fairly descriptive). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the previously mentioned combination with the teachings of Banks noted above. The skilled artisan would have been motivated to improve the teachings of the previously mentioned combination per the above such that by using a WWN a device may be coupled to the fabric at any point or via any fabric element and it will retain the same zone membership (Banks: paragraph [0056], lines 8-11).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick A. Darno whose telephone number is (571) 272-0788. The examiner can normally be reached on Monday - Friday, 9:00 am - 5:30 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2163

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PD

Patrick A. Darno
Examiner
Art Unit 2163



DONWONG
SUPERVISORY PATENT EXAMINER